In the early days, the software was hard-coded with commands and rules represented in a mathematical formula Those methods short-handed as they attempt to simulate sophisticated real-world situations and data. To solve this scarcity another software development paradigm emerges which asks whether the machine can understand as humans by having cognitive taught called Artificial intelligence or AI. AI has made a lot of improvements in recent years, allowing AI applications completely capable of gathering and extracting data to learn from the knowledge sequence called machine learning [14].

Machine learning (ML) is a vast research area with diverse learning capacities and it keeps to grow. From different learning capabilities of machine learning, unsupervised learning is one of them. This learning type is the task of clustering unorganized data to organize them based on the information they composed. Another kind of machine learning is supervised learning, unlike the unsupervised approach, for every data input there is a corresponding output label, the network task is to learn how to map from input to it label in testing time (R.B. data is paired dataset). Semi-supervised learning is another kind of machine learning approach when some section data is labeled and the rest section is unlabeled. Even ML plays very tremendous work, in recent days, but it still fails to process complex data like image and video. So as to work with such complex data types Deep Learning is an alternative which subfield of machine learning.

Deep learning (DL) is another mechanism of learning from data in sequential filter layers while the previous approaches learn from data representation. DL filter present data information one in terms of another which build a hierarchical ordered of features. These features enable us to extract high-level features. The first emerged deep learning was the artificial neural network ANN [15]. Convolutional Neural Network (CNN) was introduced by Yann LeCun [17] in 1989 to recognize handwritten digits but the lack of a large dataset and low computing capability at a time limit its popularity. CNN bloom after Alex-Net [16] archive a significant win in the ImageNet contest in 2012 using the CNN image classifier network. Alex et al work opens many scientists and researchers eye to the power of deep learning. Today high-performance models and networks are designed for face detection, object classification, and recognition.

CNN models score a high success on classification models, classification models are tasked to predict label for given input . In other sense, Generative models are the Multiplicative reciprocal of classification networks.

One interesting outlet